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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/937,842	09/28/2001	Mikihiro Kaga	983.40662X00	5540

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EXAMINER

ROY, BAISAKHI

ART UNIT PAPER NUMBER

3737

DATE MAILED: 12/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application N .

09/937,842

Applicant(s)

KAGA ET AL.

Examiner

Baisakhi Roy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement filed September 28, 2001 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1-3 are rejected under 35 U.S.C. 102(a) as being anticipated by Maki et al. (5803909).

Regarding claims 1 and 2, Maki et al. disclose a biological optical measurement instrument with a probe irradiating light beams having a plurality of wavelengths, collecting light transmitted through the subject with optical fibers held in place with an optical fiber fixing member or means for attaching the optical fibers to the optical fiber fixing member, a support member to support the optical fiber fixing member, and means for allowing movement of the subject

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without compromising or impeding the process of generating optical measurements (abstract, col. 8 lines 1-30, col. 16 lines 22-29, col. 18 lines 17-26 lines 42-67, col. 19 lines 1-7, col. 20 lines 9-25, col. 26 lines 7-44).

Regarding claim 3, Maki et al. further teach said optical measurement instrument to include a display means (col. 4 lines 19-23, col. 5 lines 15-22, col. 7 lines 65-67, col. 8 lines 53-67, col. 9 lines 1-8 lines 65-67, col. 10 lines 1-2, col. 12 lines 4-7, col. 13 lines 31-67, col. 14 lines 1-26 lines 42-64, col. 15 lines 44-60).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4, 6-8, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maki et al. in view of Yamashita et al. (6240309).

Regarding claims 4, 14, and 15, Maki et al. as described above, teach the measurement probe irradiating and collecting light beams having a plurality of wavelengths at a plurality of positions of a subject via an optical fiber, probe casing to catch the end portions of the optical fibers and producing a picture image (abstract, col. 4 lines 7-32, col. 8 lines 1-30, col. 16 lines 22-29, col. 18 lines 17-26 lines 42-67, col. 19 lines 1-7, col. 20 lines 9-25, claims 1-18). Maki et al. further teach means for allowing movement of the subject without

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compromising or impeding the process of generating optical measurements (col. 26 lines 7-44). Maki et al. however does not explicitly teach said probes to include a probe holder. Yamashita et al. disclose a biological optical measurement device, which makes use of a probe device for conducting optical measurements with a probe holder (col. 12 lines 7-34). It would have therefore been obvious to one of ordinary skill in the art to use the probe arrangement teaching by Yamashita et al. in the teaching by Maki et al. for the purpose of holding the subject and preventing displacement of contact position between the fibers and the subject due to movement of the subject.

Regarding claim 6, 14, and 15, Maki et al. teach said apparatus to include a support structure or belts for the measurement probes (col. 18 lines 62-67, col. 19 lines 1-12).

Regarding claim 7, Maki et al. does not explicitly teach said probe device to include a covering or casing. Yamashita et al. teach said probe device to include a component for covering the probe casings (col. 12 lines 24-32). It would have therefore been obvious to one of ordinary skill in the art to use the device casing teaching by Yamashita et al. in the teaching by Maki et al. for the purpose of covering the probe device.

Regarding claim 8, Maki et al. does not teach said probe device to be composed in a cylindrical shape with holes. Yamashita et al. teach said probe holders to be in a cylindrical shape with holes (col. 12 lines 22-23). It would have therefore been obvious to one of ordinary skill in the art to use the probe

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structure teaching by Yamashita et al. in the teaching by Maki et al. for the purpose of creating an incomplete cylindrically shaped probe device.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maki et al. in view of Yamashita et al. as set forth above, and further in view of Swanson et al. (5321501). Maki et al. and Yamashita et al. does not teach said probe being able to move in a horizontal direction. Swanson et al. disclose a probe device with the ability to constitute movement in horizontal direction (col. 2 lines 45-47, col. 6 lines 2-7). It would have therefore been obvious to one of ordinary skill in the art to use the probe device movement teaching by Swanson et al. in the teaching by Maki et al. and Yamashita et al. for the purpose of enabling movement in the horizontal direction.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maki et al. in view of Yamashita et al. as set forth above, and further in view of Chance (5987351). Maki et al. and Yamashita et al. does not explicitly teach said probe device to include means for displacing hair. Chance discloses a biological optical measurement device with a probe having the means to displace hair (abstract, col. 15 lines 21-57, col. 16 lines 5-33, and claim 2). It would have therefore been obvious to one of ordinary skill in the art to use the hair displacement means teaching by Chance in the teaching by Maki et al. and Yamashita et al. for the purpose of displacing hair coming in between the optical fibers and skin surface and directing light into the optical fibers.

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maki et al. in view of Yamashita et al. as set forth above, and further in view of

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Einzig (5178153). Maki et al. and Yamashita et al. does not teach said probe having a compressed air injection means. Einzig discloses a biological optical measurement device comprising of a probe device with compressed air means to ensure that light is directed into the optical fibers without any barriers (col. 20 lines 1-24). It would have therefore been obvious to one of ordinary skill in the art to use the compressed air means teaching by Einzig in the teaching by Maki et al. and Yamashita et al. for the purpose of displacing hair coming between the fibers and the skin surface of the subject or directing light into the optical fibers.

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maki et al. in view of Yamashita et al. as set forth above, and further in view of Sun et al. (4752141). Maki et al. and Yamashita et al. do not teach said apparatus to include a pressure sensor. Sun et al. teach an optical measurement device with a pressure sensor (abstract, col. 4 lines 57-68, col. 5 lines 1-8 lines 55-68, col. 10 lines 14-29, col. 11 lines 7-42, col. 12 lines 3-14). It would have therefore been to one of ordinary skill in the art to use the pressure sensor teaching by Sun et al. in the teaching by Maki et al. and Yamashita et al. for the purpose of monitoring contacting pressure of the optical fiber caught onto the skin surface of the subject.

9. Claims 12, 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maki et al. in view of Yamashita et al. as set forth above, and further in view of Benaron et al. (5769791).

Regarding claims 12 and 16, Maki et al. and Yamashita et al. do not teach said apparatus to include means for shielding the light beams from the optical

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fibers and the subject. Benaron et al. disclose a biological optical measurement device allowing the shielding of the light beams from the optical fibers and the subject (col. 5 lines 9-16). It would have therefore been obvious to one of ordinary skill in the art to use the light shielding mechanism teaching by Benaron et al. in the teaching by Maki et al. and Yamashita et al. for the purpose of shielding the light beams from the optical fiber and protecting the subject from the light beam from the optical fibers.

Regarding claim 13, Maki et al. further teach said apparatus to include mechanism to press the optical fiber into the skin surface of the subject (col. 18 lines 17-32 lines 52-67, col. 19 lines 1-2).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baisakhi Roy whose telephone number is 571-272-7139. The examiner can normally be reached on M-F (7:30 a.m. - 4p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.




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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*B. R.*

BR

  
**ELENI MANTIS-MERCADER**  
**PRIMARY EXAMINER**